

# Benchmarks

These are the articles published in the September/October 1997 issue.

These pages are meant for use as an archive for the University of North Texas publication *Benchmarks*. Many of these files are old and contain information and links to sites that no longer function. This is because, over time, many sites shutdown or change addresses thus voiding all links to them. Please keep in mind that all links may not work as they should.



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# Welcome Back to School!

By Maurice Leatherbury, Ph.D., Director of Academic Computing ([leatherb@unt.edu](mailto:leatherb@unt.edu))

I always get excited about a new school year getting my new box of crayons and shiny new yellow pencils that signal a fresh beginning in the Fall. Today, of course, the "crayons" is a software package for your PC that lets you draw on a computer monitor and the pencils are our word processors (how many of you remember the very early one entitled "Electric Pencil?") Whatever form our learning technologies take, their renewed adoption at this time of year quickens the blood of those in academia who love teaching and learning.

## New, Improved Computer Services

We in Academic Computing Services will be providing new and improved computer services to the UNT community in the coming academic year. Let me describe some of the most significant expansions of service that we have in the works.

- Our central research minicomputer ("Sol") has doubled in capacity to eight 250 MHz UltraSparc processors, 2 GB of memory, and about 90 GB of disk storage. The researchers on campus who rely on that computer should notice greatly reduced processing times on their jobs as a result of this upgrade, which completes a \$500,000 upgrade that was started last Fall.
- The [Interactive Learning Team \(ILT\)](#), headed by Jenny Jopling, has an additional full-time development [person on board](#), so they are able to better meet the needs for instructional development assistance than in the past. In cooperation with the new Coordinator of Distance Education, the University Libraries, and ACS's own Central Web Support group, the Interactive Learning Team will be part of a coordinated effort to provide consulting, training, and development assistance for distributed learning on campus. A major focus of that new "Distributed Learning Team" will be distance education.
- We've also gained one-and-a-half new positions in our [Central Web Support group](#). They're working on campus-wide Web projects including an up-to-date Web calendar of campus events, additional training on Web authoring, expanded support for departmental authoring, and forming an informal interest group of Web developers on campus. Because of the very rapid rate of change in Web software and services, it's hard to predict what other Web projects Mark Wilcox's group will tackle, but let them know if you need specific products or services that aren't available now.

We'll be very active participants in what promises to be a major tool for computer support personnel across campus a new call tracking system. [Chris Strauss](#), the Help Desk manager, is the lead technical support person for that product, the Remedy Action Request System. Expected to become operational early in 1998, the ARS will let support personnel share their expertise more easily than is now possible, better track requests for assistance, and eventually let end-users find out the status of their problem reports.

- Our [Statistical Consulting Services](#) department continues to improve its expert advice on the use of statistical analyses in research. While we certainly have to share the credit with UNT's Political Science department, we're proud that [Karl Ho](#), who heads that service, received the Samuel Beer Award from the American Political Science Association for the best dissertation in British Politics in 1997. Karl's award reflects the deep level of expertise that he and his two assistants are able to share with researchers here.
- A recent tripling in disk capacity on our newsgroup server will allow us to increase the time we're able to hold postings for most of the groups we get from our news "feeds." Also, we'll

continue to expand our very popular listserv service which, since its inception early this year, already supports 65 lists. Bahram Paiani can help you get a list established for your class, organization, department, etc.

- In the article, "[Computing Center Restructures Internet Services for Students](#)", [Dr. Philip Baczewski](#) describes the changes in our newly-titled Internet Services. We have high hopes that the modifications we're making to our internal procedures and to the focus of those procedures will result in a better level of service for persons who use ACS' computers to receive their E-mail and host their Web pages.

The service improvements that I've listed above are only the most noticeable ones that we've initiated recently. Academic Computing Services will continue to strive to meet the needs of students and faculty for instructional and research computing in the forthcoming year. Please let me know if you have any suggestions about how we can help meet your needs.

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1. Joey Hoffman, who had been a part-time member of the ILT, took this full-time position.

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2. Sharon Marek, who has been a part-time employee in the Central Web Support area for some time now, was hired full-time in September. We're hoping to have the second position filled soon.

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# Student Internet Services Restructured

By [Dr. Philip Baczewski](#), Assistant Director, Academic Computing Services  
([baczewski@unt.edu](mailto:baczewski@unt.edu))

The UNT Computing Center is instituting some changes in the Academic Computing Services and Support Services areas with regard to our provision of on-line Internet services to students. These are not, for the most part, technical changes, but rather changes in the way that we describe and support the services that students use. New documentation and procedures for accessing UNT Internet Services have been phased in over the Summer terms of 1997 with full implementation in effect as of the beginning of the Fall semester.

A group of Academic Computing Services, Network and Microcomputer Services, and Support Services staff within the Computing Center have worked to create a more refined definition of our Internet and host services. Rather than using the de facto term "Jove ID" to mean a number of services which might include access to the UNIX system named Jove, dialup service, E-mail service, etc., we now use the term "Internet Account" to refer to the User-ID and password which provide students basic access to E-mail and other Internet and remote access resources.

By better defining and better supporting our basic Internet Service, we are making it possible for students to access E-mail and other Internet resources without needing to learn complex UNIX commands and programs. This will have the added benefit of making more efficient use of the resources on jove.acs.unt.edu (the current host server for most student Internet services), as well as providing us with the flexibility to further segregate Internet services onto multiple platforms if that becomes necessary in the future. The new approach to services will greatly simplify matters for most students as well as eventually lessen the load currently straining our Support Services staff (Computing Center Helpdesk).

"UNT Internet Service" is the new catch-all name for the services available via an authenticated User-ID in the Jove/NIS password database. Primary access to these services is via client/server software which runs on a PC or Macintosh microcomputer. The layout of this service is as follows:

## UNT Internet Service

### ■ **Basic Internet Service:**

- Simeon E-mail - Simeon has become the default and recommended method for students to check their mail. Jove shell access is available by request, however Pine on Jove is no longer the default recommendation for checking E-mail.
- Netscape/Internet Explorer - We are distributing Netscape and supporting both Netscape and Internet Explorer. Netscape, however, is required to use the Account Management page described below.
- Web-based Account Management (Password Change, etc.) - A new Web page is available for changing passwords, requesting a username change, checking storage quota, and setting up a initial Web page. This page can be accessed at: <http://people.unt.edu/manage/> Other services will be added to this page in the future.

### ■ **"Beyond Basic" Internet Service:**

- Beyond Basic service includes a number of additional supported software items for those whose activities extend beyond basic E-mail and Web browsing. Included in this

category are:

- FTP Clients
- VT100 Telnet Clients
- TN3270 Clients
- Netscape News Clients
- Personal Web Page Publication - We are supporting Netscape Composer for creation of personal Web pages.

The UNT Internet Service is available to students in General Access Labs that have Netscape and Simeon installed, as well as at home via Remote Access Services (dialup).

▪ **Remote Access Service:**

- Free PPP Dialup - free but with limited access to telephone lines
- Premium PPP Dialup - \$45/long semester, but with a guaranteed ratio of users to lines (currently 7/1).

**UNT Host Services**

Additional to the above described Internet Service, host services are still available via the UNT Internet Service or via Remote Access Service alone using a terminal emulator (Procomm/Kermit/ZTerm, etc.). We define UNT Host Services as follows:

▪ **ACS Host Services:**

- UNIX User-ID (to include one to all of the following):
  - Jove (UNIX messaging)
  - Sol (Research)
  - Terra (Class Instruction)
- Academic Mainframe
  - VM/CMS
  - MVS/ESA (Academic Com-Plete)

▪ **Other Campus-wide Hosts:**

- Library Catalog (terminal access)

**More to Come**

The UNT Internet Services work group is still in the process of identifying and updating any user documentation which refers to these services and redesigning some software services which support access to UNT Internet Services. Also in the works is a UNT Internet Services CD-ROM to include automated installers to make it easier to setup and configure various programs used for Internet Access. Information can be found at our newly published UNT Internet Services Web page: [www.unt.edu/helpdesk/inet/](http://www.unt.edu/helpdesk/inet/) Or, for further information, contact:

Dr. Philip Baczewski  
([baczewski@unt.edu](mailto:baczewski@unt.edu))  
Associate Director of Academic Computing  
UNT Computing Center  
(ISB 119, 940-565-3886)



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1. UNT Internet Services documentation can be found on the Helpdesk Web site at [www.unt.edu/helpdesk/inet/](http://www.unt.edu/helpdesk/inet/) and is also available in printed form from the Computing Center Helpdesk, ISB 119.

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2. UNT Host Services documentation can be found on the Helpdesk Web site at [www.unt.edu/helpdesk/hosts/hostsTin.htm](http://www.unt.edu/helpdesk/hosts/hostsTin.htm)

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# We're Popular!

By Mark Wilcox, UNT Web Administrator ([mewilcox@unt.edu](mailto:mewilcox@unt.edu))

[Alexa.com](http://Alexa.com), a company that provides a Web archiving service and makes a browser plug-in for searching, rates Web sites on total traffic as part of it's service. They rated UNT's site ([www.unt.edu](http://www.unt.edu)) in the top half of all Web sites, including finishing inside the top 100,000 sites. It is estimated that there are currently at least 50 million Web sites.

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# Jove and E-mail System Problems

By [Dr. Philip Baczewski](#), Associate Director of Academic Computing ([baczewski@unt.edu](mailto:baczewski@unt.edu))

The Jove UNIX system was victimized by Internet-based hacking activity shortly before the beginning of the fall semester. In order to secure the system it was necessary to reinstall system programs which were corrupted as a result of the breach of security. This process led to an unfortunate sequence of events that resulted in the loss of some data on Jove. Part of these events included memory bank and controller hardware failures on the Jove system which took three days for [Sun](#) Service to fully resolve, and which resulted in an incorrect disk controller configuration. Because of additional problems with our backup software system, files or mail folders in Jove home directories which were updated or saved between August 2 and August 17, 1997 were not backed up. It is not possible, therefore, for us to restore new files or changes made in files during that time frame.

## Personal Account Security

This breach of security reemphasizes the need to maintain your personal account security at the highest level possible by using a secure password (especially one which is not a word found in a dictionary or a name), and by following the UNT policy which forbids sharing of your account with anyone else regardless of the circumstance. While any Internet-connected system is vulnerable to compromise, we have taken steps to limit unauthorized access to Jove and other systems. Each individual user can help by following our usage policies and reporting any suspicious activity by sending E-mail to [helpdesk@unt.edu](mailto:helpdesk@unt.edu) or by calling 565-2324. Additionally, we are taking steps to ensure that our backup process will reliably provide maximal recovery of data should it be required. Academic Computing Services is sorry for any inconvenience caused by this down time. You can be sure that we are taking all steps possible to lessen the likelihood of future security breaches and to hold accountable those responsible for this latest incident. Applicable policies may be found at: [www.unt.edu/ACSUNIX/policies/general.html](http://www.unt.edu/ACSUNIX/policies/general.html)

## Recurring Hardware Problems

Hardware problems have continued to plague Jove, culminating with the replacement of the entire System Board in early October. Since that time, things have been running smoothly and we hope that these problems will become a thing of the past. Up-to-date information about UNT's central UNIX systems can be found on the Internet Services and UNIX Host System News page ([http://people.unt.edu/cgi-bin/sysnews\\_0.cgi](http://people.unt.edu/cgi-bin/sysnews_0.cgi)). This page can also be accessed from the UNT Internet Service Account Management Page (<http://people.unt.edu/manage/>).

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# UNIX Password Changes

By Dianna Laakso, UNIX System Administrator ([dianna@unt.edu](mailto:dianna@unt.edu))

Due to recent security compromises, UNIX System Management has begun periodic scans of all passwords for passwords that are easily guessable. Weak passwords can provide a door for intruders to initially enter a system, and begin an attack. For this reason it is imperative that users select passwords that are difficult to guess.

If you are uncertain whether or not your password is a good password, read the guidelines that follow for help.

When a weak password is found, the System Manager will notify the account owner via E-mail and ask that the password be changed immediately. Another check will be performed the following week, and all remaining weak passwords will be expired at that time with no further notice. If you do not receive E-mail, you may assume that your password is secure.

We now provide a Web based utility for changing your password. This utility checks for weak passwords before changing the password. It is located at <http://people.unt.edu/manage/>

## Password Guidelines

Good passwords are passwords that are difficult to guess. In general, good passwords:

- Have both uppercase and lowercase letters
- Have digits and/or punctuation characters as well as letters
- Are easy to remember, so they do not have to be written down
- Are seven or eight characters long
- Can be typed quickly, so somebody cannot follow what you type by looking over your shoulder

Suggestions for good passwords:

- Take two short words and combine them with a special character or number (e.g. robot4my or eye-con)
- Put together an acronym that's special to you, such as Notfsw (None Of This Fancy Stuff Works)

To be secure, a password should not be any of the following:

- Your name
- Your spouse's name
- Your parent's name
- Your pet's name
- Your child's name
- Names of close friends or coworkers
- Names of your favorite fantasy characters
- Your boss's name
- Anybody's name
- The name of the operating system you're using
- The hostname of your computer

- 
- Your phone number
  - Your license plate number
  - Any part of your social security number
  - Anybody's birth date
  - Other information easily obtained about you
  - Words such as wizard, guru, gandalf, etc.
  - Any username on the computer in any form
  - A word in the English dictionary
  - A word in a foreign dictionary
  - A place
  - A proper noun
  - Passwords of all the same letter
  - Simple patterns of letters on the keyboard (e.g. qwerty)
  - Any of the above spelled backwards
  - Any of the above followed or prepended by a digit

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# Secure Output From MVS and CMS

By [Dr. Philip Baczewski](#), Assistant Director, Academic Computing Services  
([baczewski@unt.edu](mailto:baczewski@unt.edu))

Designation of output as secure should be specified only for output that is **critically** important. Secure printouts re-filed in limited access boxes. You must present your UNT ID to the consultant at the output window to retrieve your printout.

- To Specify SECURE filing for MVS Batch jobs: In the Job card name field, specify '\$lastname' (use the single quotes - your name can include up to 19 characters). You must include the leading dollar sign (\$) and you must use the last name which appears on your UNT ID. If space allows, you may also include all or part of your first name after the last name. Example JOB cards are as follows:

```
//AANNJOB JOB (AANN,2,30),'$LONGFELLOW',USER=AANN,  
// PASSWORD=SECRET  
//AANNJOB JOB (AANN,2,30),'$DOEJOHN',USER=AANN,  
// PASSWORD=SECRET
```

- To Specify SECURE filing for CMS Output: Set "\$lastnam" as the CMS printer distribution specification, where "lastnam" is the first seven letters of your last name. You must include the leading dollar sign (\$) and you must use the last name which appears on your UNT ID. If space allows, you may also include all or part of your first name after the last name. Example commands to change your printer distribution from the CMS Ready; prompt are as follows:

```
SPOOL E DIST $LONGFEL  
SPOOL E DIST $DOEJOHN
```

The distribution field will remain in effect until you issue another "SPOOL E DIST name" command, IPL CMS, or log off and log back onto CMS.

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# Secure Shell Installed on UNIX Hosts

By Dianna Laakso, UNIX System Administrator ([dianna@unt.edu](mailto:dianna@unt.edu))

Secure Shell (SSH) has been installed on the Jove and Sol systems. SSH is a program for logging in to a remote machine and executing commands. It is intended to be a secure replacement for rlogin and rsh, by providing encrypted communications between two host machines over an insecure network. Some of SSH's features include:

- **Strong authentication.** Closes several security holes (e.g., IP routing, and DNS spoofing).
- **Improved privacy.** All communications are automatically and transparently encrypted (key exchange is done via RSA and the communication is encrypted via IDEA). Passwords are never transmitted via cleartext.
- **Secure X11 sessions.** The program automatically sets DISPLAY on the server machine, and forwards any X11 connections over the secure channel. Fake Xauthority information is automatically generated and forwarded to the remote machine; the local client automatically examines incoming X11 connections and replaces the fake authorization data with the real data (never telling the remote machine the real information). SSH is invoked by typing any of the following commands: **rlogin**, **rsh**, **slogin**, or **ssh**. If the remote machine is running an SSH server, the server will authenticate the user's identity. If the authentication is successful, the server will log the user on to the remote machine and open an encrypted connection. There are several different methods of authentication supported by SSH, including .rhosts, .rhosts combined with RSA, and pure RSA authentication. A description of these methods is beyond the scope of this article. Those interested should refer to the on-line SSH manual page on Jove by typing the command **man ssh**. The default authentication method is the UNIX password on the remote system.

If a user uses SSH to log on to a remote machine that is not running an SSH server, the SSH client will print a warning message to the user, and fall back to using regular rlogin and rsh over an unencrypted connection.

If you manage a UNIX machine and wish to set it up as an SSH server, please contact ACS UNIX Support via the Helpdesk (565-2324, [helpdesk@unt.edu](mailto:helpdesk@unt.edu)).

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# ACS UNIX Support Services Evaluates Solaris 2.6 Beta Release

By Dianna Laakso, UNIX System Administrator ([dianna@unt.edu](mailto:dianna@unt.edu))

UNIX Support Services began evaluation of the Beta Early Access Release of [Solaris 2.6](#) in June. Solaris 2.6 includes many new features that enhance and improve on earlier versions. Major changes in the 2.6 release are related to a more robust developer environment, support for large files, and enhancements in ease-of-use and management. This article summarizes the major improvements to look forward to as ACS upgrades its UNIX hosts to Solaris 2.6 in upcoming months.

## Solaris Installation and System Management Enhancements

- **Binary Compatibility.** Sun's documentation claims that upgrades to the Solaris 2.6 environment are risk free in terms of binary compatibility with earlier releases. Our testing confirms this for Solaris 2.4, 2.5 and 2.5.1 binaries.
- **Common Desktop Environment (CDE).** Solaris 2.6 features CDE as the default desktop, replacing Open Windows. This change is an example of Sun's ongoing migration of Solaris towards the ONC standard. New features in the desktop include Web tools, spell checkers built in to Text Editor and Enterprise Mailer, and Power Management. Power Management allows users to be more frugal with desktop resources while they're not in use.
- **Printing.** Solaris 2.6 has new print software that is an improvement over the old LP software. Print clients can now be managed via the NIS or NIS+ name services, making it possible to centralize network printing administration. The SunSoft Print Client, which was previously released as an unbundled product, is now part of the Solaris 2.6 release.
- **Changes in System Administration.** Many new network management and system administration features have been added to the 2.6 release. The new features include, but are not limited to, the following:
  - Processor Sets - Processor sets allow a set of processors to be allocated for the exclusive use of one or more applications.
  - NIS Server - Solaris 2.6 natively supports the NIS server.
  - Patch Tools - Patch installation and removal tools are now shipped with Solaris, rather than delivered with each patch shipped.
  - AutoFS - Mounts file systems as needed, and unmounts them when they are not being used.
  - NFS Client Failover - Failover provides consistent availability of read-only file systems by allowing the client to mount a replica of the filesystem from another server.
  - Dynamic Host Configuration Protocol (DHCP) - DHCP allows a host to get its IP address and configuration parameters without preconfiguration.
  - Variable Length Subnet Mask (VLSM) - VLSM allows multiple netmasks for a given network number and tailors each mask to the size of each subnet. Solaris uses the longest matching netmask when routing IP packets.

## New Security Features

Solaris 2.6 includes Sun's Automated Security Enhancement Tool (ASET). ASET performs automated security audits, and includes a C2 level security model, Basic Security Model, for Solaris. Under Solaris 2.6, Access Control Lists are incorporated directly into the operating system to provide a greater degree of control over file access at the user level.



# Changes in the Developer Environment

- **Large Files Support.** Solaris 2.6 includes support for large files up to 1 Terabyte on NFS, UFS and CacheFS filesystems. New interfaces have been added to perform asynchronous I/O to large files. There is a new option to the mount command to disable large file support on UFS filesystems, to help ensure that large files are not accidentally opened by older applications that are not able to handle large files. Solaris 2.6 offers both C and C++ support for large files.
- **Restructured /proc.** The /proc partition has been restructured from a flat into a hierarchical filesystem used to store state information and control functions. Additionally, it provides a watchpoint facility to monitor data in the address space of a process.
- **Process Scheduling.** Preemption control has been added to allow applications to give scheduling instructions to the kernel to prevent preemption for short periods of time.
- **LDAP Support.** The Federated Naming Service (FNS) under Solaris 2.6 supports Lightweight Directory Access Protocol (LDAP) and offers improved support for files and NIS back ends.

## Improvements in Networking

WebNFS is now included to make filesystems accessible on the Web via the NFS protocol. The main advantage of WebNFS is that files can be made public without the overhead associated with an anonymous FTP site. Additionally, PPP server software is bundled with Solaris 2.6.

## Improvements in Multiplatform Support

Solaris 2.6 is based on a single source code base, which ensures that future releases of Solaris will share the same features and functionality across platforms.

- **IPX Support.** New multiplatform support in the 2.6 release includes support for Novell's IPX/SPX protocol stack for connectivity to Netware LANs.
- **PCMCIA Support.** Solaris 2.6 for Intel has added support for the PCMCIA card.
- **Macintosh Application Environment (MAE).** [Machintosh](#) applications can be run under Solaris 2.6's MAE. MAE allows Macintosh application to be run without requiring any modification to the applications.
- **UltraSPARC Support.** Sun's UltraSPARC hardware is supported by Solaris 2.6. New system functions utilize the Ultra's high performance capabilities, while maintaining binary compatibility with existing SPARC applications.

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# When "It can't happen to me" Happens

By Eriq Neale, Former Student Computing Services Manager and Virus Guru

Irony is a funny thing. This is the second version of this article, and at the end I'll explain why in more detail. But it does involve irony.

I've recently become a victim of the "practice what you preach" rule. It's been quite a while since I've penned even a small treatise on the evil of computer viruses. In that time, either I've become complacent on the issue, or I convinced myself that I had so much work to do that viruses dropped pretty significantly on my priority list. Either way, I dropped my guard and got a swift kick in the pants as a result. So I thought I'd share it with you.

## Be careful out there ...

If you use [Microsoft](#) Word, you cannot be too careful. Even if you think you are being careful, chances are you're not being careful enough. Word Macro viruses are being written and spread at a rate higher than ever before, and this trend shows no signs of changing. There are two conditions that are helping to contribute to this increase. One, Microsoft changed the structure of documents and macros in Word 97 in an attempt to deter the spread of macro viruses. This has encouraged "experienced" macro virus authors to crack the changes made by Microsoft and find ways of infecting Word 97 documents. Two, anti-virus software vendors have developed tools that can effectively and safely identify and remove macro viruses. This has encouraged macro virus authors to churn out new virus code faster than they hope the anti-virus software vendors can match. There are other factors, but the latest onslaught of new viruses indicates that there is a race on between the virus authors and the virus killers. And we are caught in the middle.

In this war, we can ally ourselves on one side or the other. By doing absolutely nothing, we can ally with the virus authors. By doing nothing, we can become pawns in the game by allowing our copies of Word to become infected, thereby spreading the infection to every document we touch and distribute to our co-workers, superiors, and friends. By doing nothing, we can ignore the entire problem, hoping that it will go away, or hoping that nothing will happen to us. Or we can choose to ally ourselves with the virus killers.

We can work proactively to make sure that we don't allow our computers to become infected, eliminating one avenue for future spread. We can proactively work to identify when others have become infected and assist them in killing off the infection. We can proactively work to educate others and tell them just how bad it is out there and why they need to be concerned and proactive themselves.

## You can Help

Here are some ways you can help yourself and others:

1. Use anti-virus software, but don't assume that the job ends there.
2. If your anti-virus software supports it, configure it to automatically scan floppy disks and other removable media inserted in your computer.
3. Keep your anti-virus software updated regularly.
4. Scan everything, and I mean everything, you download off the net.

These are simple things you can do, and if you do them proactively, you can protect yourself against a majority of the virus onslaught. If you do find yourself infected, however, remember the best piece of advice offered by Douglas Adams: Don't Panic! Keep your wits about you, and you can probably come out of the situation without much damage.

But above all else, remember that it can happen to you. I was reminded of this again as I started this article the first time. Right after I finished berating myself for not practicing what I had been preaching as I was writing this, I violated a second golden rule and was once again victimized by the same clause. Microsoft Word crashed, taking with it every byte of this unsaved article.

Irony is a funny thing.

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# Updates to Anti-Virus Tools at UNT

**By Eriq Neale, Former Student Computing Services Manager and Virus Guru**

The anti-virus Web site for UNT has moved to a new location and has added some updates. The new URL for UNT's anti-virus Web is:

[www.unt.edu/virus/](http://www.unt.edu/virus/)

At this site, UNT net surfers can find the latest releases of Command Software's F-Prot Professional for DOS, Windows 3.1, Windows 95, Windows NT, and NetWare. Command Software has recently released version 3.00 of the virus scanner for Windows 95, Windows NT, and NetWare.

UNT has just netotiated a volume purchase of Symantec Anti-Virus for Macintosh, commonly known as SAM. Members of the UNT community can find scan string updates for SAM at the anti-virus Web site.

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# Updates to the ACS General Access Lab

By Eriq Neale, Former Student Computing Services Manager

The ACS General Access Lab in ISB 110 has undergone some changes over the summer. Students, faculty, and staff who make use of the lab will find seven new [PowerMac](#) 6500 computers in place of the old Quadra 650 computers. In addition, all Macintosh computers have been updated to [MacOS 8](#).

Several new software packages have also been added to the offerings in ISB 110. The latest versions of [Adobe PageMaker](#) and [Adobe PhotoShop](#) are available for both Macintosh and [Windows](#). [Adobe Illustrator 7](#) is available for the Macintosh. [Claris Home Page](#), a Web page editor, has also been added for both platforms.

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# The Network Connection

By [Dr. Philip Baczewski](#), Assistant Director, Academic Computing Services ([baczewski@unt.edu](mailto:baczewski@unt.edu))

*This column is a continuing feature of Benchmarks intended to present news and information on various aspects of wide area networks.*



## Get Thee to a Bakery

The topic of the moment is cookies. So, has this columnist's sweet tooth finally got the better of him? Is it just before lunch, and thoughts are turning to confections? Just what kind of cookies are we talking about? Not the doughy kind. A visit to the "Onelook Dictionary" ([www.onelook.com/](http://www.onelook.com/)) tells us what cookie means in Internet parlance. One look lets you search for a term in a number of different online dictionaries. It found references to cookie in seven different online computer dictionaries. So, I guess cookies are pretty popular items on the Internet.

Netscape devised the cookie standard (officially known as "Magic Cookies" ) and was first to include cookie support as a feature of their browser, but Internet Explorer can also use cookies as well. Internet cookies don't have raisins, but they do have a "raison d'etre." (Sorry, I couldn't resist.) An Internet cookie is information stored by your Web browser to track or verify information used during a session with a world wide Web site. It's necessary because the normal method of interacting with a WWW page is that your browser connects to the Web site, downloads the page and its graphics, and then disconnects. Any subsequent actions (follow a link, download a file, view a picture, etc.) just repeat the same process, with each transaction being a separate and independent connection to the host Web server. Normally, there is no continuity between sessions. For example, you might click the "Next" button on a Web page, but to the Web server, it's just a request for information that is independent of any other requests it may have had. In other words, the server does not track where you've been or what you've done (in fancy computer lingo, this is called "stateless communication").

### The meat of the cookie

Cookies are handy things when you want to use the Web to conduct a multi-step transaction. Shopping is a good example. Imagine yourself at the grocery store. You ask the clerk, "how much is this Acorn Squash?" The clerk says, "\$1.50." You say "OK, I'll buy it." The clerk say, "Buy what?" You say, "This Acorn Squash." The clerk says "Acorn Squash are \$1.50." You say, "OK, sell me one." The clerk says "Sell you one what?" and etc. (If this reminds you of where you shop for groceries, then I think we use the same store.) If every question is a new transaction, it is difficult to efficiently accomplish your ultimate goal. A more reasonable model for shopping is that you use a container like a shopping cart to store the items you intend to purchase, and then you retrieve them at checkout time. During your shopping process, the items remain in your cart, i.e. in Web terms, there is a continuity of that information (what you want to buy) from page to page (browsing the wares). That information is stored in a cookie. Not surprisingly, many Web-based vendors use the analogy of the shopping cart when allowing you to add items to your intended purchase list.

The cookie itself is a line in a file stored on your computer. It is set through an HTML instruction in the Web page that tells your Web browser to store certain information. It usually contains the address of the Web server that generated it, the path to the page that set the cookie, and any additional information that is pertinent to the transaction. The next time you use that same browser to





visit the same Web page, your browser sends the information contained in the cookie back to the Web server and the server can take action based on that information (for example, don't display frames, accept an order for software, recognize you as a previous visitor). By default, cookies only exist during your browsing session. Once you quit the browser, the cookie is gone. An expiration date for the cookie can also be set, in which case that cookie will stay around until it expires, and be transmitted every time you visit the associated Web page. (For more information about how cookies work, see [www.netscape.com/newsref/std/cookie\\_spec.html](http://www.netscape.com/newsref/std/cookie_spec.html).)

### **Are cookies bad for you?**

There has been some concern expressed that use of cookies can lead to an invasion of your privacy and provide businesses with detailed data on your buying habits and interests. While there is potential for abuse in that regard, you needn't develop an irrational fear of cookies. There are some sensible steps you can take to protect your privacy. The first thing to realize is that the amount of information about you that can be automatically gathered via a Web browser is usually limited to your E-mail address (if you've configured it in your Web browser), your originating Internet node (which may change every time you connect if you are using a dial-in service), and your computer system type (Macintosh, Windows, etc.). The element of information that is added by a cookie with a long expiration date is what home pages you have visited. But remember, cookie information is only transmitted back to the site for which the cookie is set. In all but a few cases, cookies are usually transitory and only involve the Web server whose page you are viewing.

Ah, but when your mother said that too many cookies are bad for you, she was probably right. There are some companies which sell Internet advertising and whose ads will set a cookie back to the advertiser's server. This happens when you view the page on which the advertisement appears. If you click on the advertisement to find out more information, that Web server will be able to read the cookie and know where you saw the ad. Now advertising in itself is not a bad thing necessarily, and the cookies in question might just help the advertiser provide you with information of interest to you (while objectionable to some, advertising does support a number of services which are free to us who browse the Web). Left unchecked, however, some clever marketer will probably be able to gather enough information to create a detailed buying profile and possibly bother you with more information and attention than you want.

### **You control the cookies**

Fortunately, Netscape and other browsers give you some control over who can and can't set a cookie on your browser. Netscape includes an option to warn you before accepting any cookie and gives you the opportunity to reject any that you don't wish set. For example, if a cookie is being set for a server that is different than the one you are accessing, you can cancel that cookie and it won't be set. Netscape Communicator version 4, includes a preference feature to do this automatically. You can also tell Netscape to reject all cookies, however, this may prevent you from taking full advantage of some Web-based services. The bottom line: your mother was right. A few cookies are okay as long as they don't spoil your appetite for dinner (or Web browsing).

### **Some Dessert!**

Since this column is about cookies, it is only fitting that it have a dessert. You see in researching this column I began wondering about the origin of the word "cookie," and found in my dictionary that it was probably from the Danish word for small cake. This made me think, because this is the way I think, "I wonder what Hamlet might have said about cookies," since, of course, Hamlet was Prince of Denmark. In the process of researching that question I revisited a site that I hadn't been to in a while and rediscovered a great online resource. The Internet Public Library ([www.ipl.org/](http://www.ipl.org/)) is hosted by the School of Information at the University of Michigan. As well as being a good starting point





for all kinds of online research, it also includes a collection of online texts, including a whole section devoted to Shakespeare. In just a couple of clicks, I was viewing the complete text of Hamlet, which was quite a convenience, since my complete works was on my bookshelf at home. Check out (so to speak) the many texts available via the Internet Public Library. You can also find where "Hamlet, Cool Web Dude" might have said, "the browser's the thing wherein I'll catch the cookie of the king."

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# List of the Month

*Each month we will highlight one Internet, USENET Special Interest Group (SIG), or similar mailing list. This month's list is a group of lists...*

## The HowToWeb Update via [update-list-request@howtoWeb.com](mailto:update-list-request@howtoWeb.com)

Owner: [gggsubs@aol.com](mailto:gggsubs@aol.com)

The HowToWeb(TM) Update is a free bi-weekly newsletter which provides links and descriptions of content-rich Web sites and services. Each issue has its own theme and is available online at [writenews.com](http://writenews.com) and by E-mail.

The premier issue focuses on U.S. newspapers online. Almost all major U.S. newspapers have made the move online, some more successfully than others. The first Update describes and links to newspapers that have flourished in their online adventures.

To subscribe to the HowToWeb(TM) Update by E-mail, readers should send an E-mail to [update-list-request@howtoWeb.com](mailto:update-list-request@howtoWeb.com) with **subscribe** as the subject of the E-mail.

Each issue is also available online at:

[www.writenews.com/howtoWeb/](http://www.writenews.com/howtoWeb/)

Writers Write, Inc. says they don't sell or give away subscribers' E-mail addresses to third parties.

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# WWW@UNT.EDU

By Mark Wilcox, CWIS Coordinator ([mewilcox@unt.edu](mailto:mewilcox@unt.edu))

*This column covers features and resources available through the University's Campus Wide Information System (CWIS). UNT's Home Page on the World Wide Web can be found at <http://www.unt.edu>.*

## What it takes to be a Webmaster

Another fall semester is upon us. This time last year I was finishing up my masters in Library and Information Science here at UNT and was starting to look for a job. This fall marks the first time in my life where I do not have to attend school (as a student anyway) and so I thought I would dedicate this column to discussing what it takes to become a "Webmaster".

I'm often asked what it takes to do my job. That's one of the toughest questions I'm ever asked. Mostly because I think people want an easy answer (e.g. Take these x # of classes and you too can become a "Webmaster"). Unfortunately that's not really the case.

### My Job ...

First let me define my job. In my particular position, my first priority is to make sure that UNT's central Web site ([www.unt.edu](http://www.unt.edu)) stays up and running. This includes managing the server hardware (and any backup servers we may set up) and maintaining the hyperlinks throughout the central Web site. This often requires coordination with our primary UNIX support staff and my assistant (who often is the one who spots & fixes any broken links). Second I support a secondary departmental Web server, the UNT Internet Services Web server ([people.unt.edu](http://people.unt.edu)) and the remnants of our gopher site. Third I help create any new accounts required by faculty, staff and student organizations need to place sites on our central Web server. I also do the entire server side programming (such as interactive forms, the Web Conferencing System and co-developed the new UNT Internet Services Account management system). My assistant and I also teach several short courses each semester on a variety of subjects. Finally I also keep my eye out on upcoming Web technologies like Java, LDAP, and the multitude of other odds & ends out there.

That's just the basics. That doesn't cover consulting with faculty or staff on new sites, planning meetings, crisis situations (e.g. paged at 3 a.m. in the morning, tech support on the phone while on vacation) or spending an hour on the phone listening to vendors explaining why "Their new Web product is the best solution to your business problems." There's just an awful lot of material that one needs to know to do my job successfully.

### Your Job ...

What I really want to point out is that the Web is here to stay. It's a young technology, which is bound to go a billion different ways, and open up new jobs that haven't even been thought up yet. I do think the future of development is going to be in the area of Intranets/Extranets, private networks that use Internet technologies to link them together.

Yes most of these are corporate, but there are several avenues one can pursue in these areas. There is the basic homepage designer, but just knowing HTML won't cut it anymore. JavaScript and



knowledge of at least one site creation tool like Microsoft's FrontPage will be a requirement. A basic knowledge of how to use JAVA applets and Active-X controls will be necessary too. RTF majors might want to look into streaming media technologies like Real Audio/ Video, Microsoft NetMeeting, CU-C-ME, and other ways of moving film and video over the Web. Information professionals will be needed to help access all this information (e.g. basic cataloging). System Analysts will be needed to design the networks. System administrators and programmers will be needed to make the systems "run". Who knows maybe there will be a market for physical trainers and naturalists to help the people who are the "cogs" of the Information Revolution to lose those love-handles and get back in touch with reality while on the job.

The necessary computer skills for being a Webmaster often will not be found in particular classes. Things are just moving too fast. The good news is, though, that much of the information you need to learn is out there on the Net for free, and you can often ask the author if you have any questions. Also, the basic skills you need to try out more advanced topics is a much lower hurdle to cross than it was just a few years ago. You can learn the majority of the client-side technology on a decent PC with Windows 95 (or Apple Macintosh) and a good browser like Netscape Navigator 3.0 or 4.0 or Internet Explorer 3.0. The JAVA programming language is available free of charge and Microsoft has even made a free working evaluation of it's JAVA editor available, that contains 90% of it's "for purchase" copy and doesn't time out!

If you want to learn server side stuff, a 486 with 16 MB of RAM and a copy of LINUX will give you the basic tools to try it out.

In conclusion, there are a number of different jobs out there. All that stands between you and one of them is some basic knowledge and the willingness to try.

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# New Phone Numbers

The Dallas and Ft. Worth dial-up lines are being moved and re-configured. Page two of this issue shows the new Dallas numbers. The Ft. Worth premium number will remain the same. Call 940-565-2324 for more info.

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# We've Got Computer Advantage!

*This is an edited version of an article that appeared in the October 1997 **Human Resources Newsletter**.*

UNT has a long-standing tradition of support for training by peers through the Service Advantage program. The *Service Advantage Facilitators* are a group of trainers who work in many different departments at UNT and lead a variety of service-related courses on campus. Computer Advantage is the next logical step!

Led by Sandy Burke, Computing Center trainer, a new group of 20 staff members are learning to become "subject experts" in software applications. Thanks to their expertise, UNT will be able to offer more computer classes to better meet the training needs of Faculty and staff. Contact Human Resources (565-4246) for more information on the Computer Advantage program.

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# Information Resources Council News



**Minutes provided by Sue Ellen  
Richey, Recording Secretary**

**IRC Regular Voting Members:** Philip Turner, Associate Vice President of Academic Affairs for Distance Education and Dean of the School of Library and Information Resources (Chair); Jenny Jopling, Instruction Program Group; Dennis Mueller, Research Program Group; Don Grose, Libraries; Walter Bowen, Academic Administration; John Todd, Faculty Senate; Kathleen Swigger, College of Arts and Sciences; Bill Buntain, Communications Program Group; Cengiz Capan, College of Business; Joneel Harris, Administrative Program Group; Paul Dworak, College of Music; David Hartman, School of Community Services; Paul Schlieve, College of Education; Chuck Fuller, Fiscal Affairs; Carolyn Cunningham, Student Affairs; Steve Oeffner, UNTHSC Information Technology Services; Steve Miller, Human Resources; Clare Popejoy, Graduate Student Council; Steve Grant, UNT Health Science Center; Allen Livingston, Student Association; Russ Pensyl, School of Visual Arts; Virginia Wheelless, Chancellor. **IRC Ex-officio Nonvoting Members:** Richard Harris, Computing Center; Coy Hoggard, Computing Center; Maurice Leatherbury, Computing Center; Jim Curry, Microcomputer Maintenance Shop; Rondel Stevens, Telecommunications; Sue Ellen Richey, Computing Center (Recording Secretary)

## **June 17, 1997**

*There being no quorum, this meeting was declared unofficial.*

### **Web Publishing policy**

Maurice Leatherbury distributed a draft of a revision of the existing Web Publishing policy 7.6 which was approved by the IRC less than a year ago and some informal guidelines. The new policy drops the term CWIS since there is no longer a Gopher product. He explained that he wants everyone who is using database type applications over the Web to understand that the auditors have to approve anything that is related to official records and financial transactions. There is also a new copyright and security statement included in the document. The Web publishing guidelines are intended to be informal without any enforcement procedure included; it is more to give people guidelines about how to publish on the Web. Maurice explained that course materials placed on the Web are considered University business and, as such, come under these guidelines and policy. Further, he stated that publishers are urged to be responsible about the content of what they publish on the Web, relative to coursework, and that somewhere in the document it should state that it is published at UNT. It was suggested that the term "home page" be clearly defined in the document.

### **Workstation upgrade proposal**

Dr. Turner reported that at the recent IR Steering Committee meeting, the workstation upgrade proposal was given final approval and will be sent to the Deans for implementation as soon as the

examples are ready to send with it. The request for \$600,000 to be designated for the Innovative Projects program was discussed and it was added to the list of projects for Dr. Brownell to allocate funds for next Fiscal year.

## **Strategic Planning**

Richard Harris reported that the IRC Strategic Planning Committee met on May 23 at which time they discussed the Master Plan for the University. Dr. Turner has been very active in assuring that communications infrastructure is treated as a university-wide facility, and given equal priority with buildings. There are also some planning assumptions in the plan that 20% of all semester credit hours will be taught by distributed learning by the year 2004. It was proposed that around \$750,000 per year be allocated for communication infrastructure upgrade. Composition of the Strategic Planning Committee was also discussed. Dennis Mueller again stressed the importance of departmental programming support having a high priority in the Strategic Plan. The planning calendar was also discussed and it was agreed that Technology Reports will only be done every 2 years.

## **Distributed Computing**

Maurice Leatherbury reported that two subcommittees of the Distributed Computing Support Management Team are actively working:

1. the Call Tracking Software subcommittee is close to having a product selected; and
2. the Desktop Standardization subcommittee has a draft recommendation being reviewed by the Standards & Cooperation Program Group. The sensitive issue in this relates to choosing a standard word processing software. Maurice announced that Paul Dworak will be holding an open forum on July 10th to discuss word processing standardization, in University Union, Room 411.

## **Instruction Program Group**

Jenny Jopling reported that the Instruction Program Group met in Wooten Hall to survey some classrooms to assess lighting in both a small classroom and a large classroom to evaluate what needs to be included in the classroom survey that Dr. Kesterson is doing. Maurice has created a database that will allow the electronic data entry of the survey results.

## **July 15, 1997**

### **Word processing standardization issues**

Dr. Turner reported that the Standards & Cooperation Program Group held a very beneficial forum to discuss word processing standardization issues. As a result of the forum, Maurice has asked to take the issues back to the Distributed Computing Support Management Team and then bring a more specific proposal to a future IRC meeting. Maurice added that the DCSMT has a subcommittee dealing with standards for desktop application software, the most controversial being word processing. The original document proposed that Microsoft Word and Office 97 be the standard, and after a lot of discussion with a number of people, including Charldean Newell of the Faculty Senate, it was decided to include continued support of WordPerfect. There are essentially two issues:

1. which software package we want to standardize on; and
2. what file format is to be used for transmitting files from one person to another via e-mail.

Maurice stated that the forum was a valuable tool to end-users and support personnel alike, for communicating the issues and facilitating understanding of the problems. The DCSMT will meet Friday, July 18th, at which time some of the issues will hopefully be clarified, such as the obligations of the network managers in supporting various software packages. It is hoped that the open forum can be repeated in the future for communicating other campus-wide issues with end-users.

Dr. Turner asked for input from the Council members on the subject of standardization of desktop application software. Paul Schlieve stated that his college has spent several years developing certain forms that are used for UNT business and that re-designing those forms on new software packages would be a great burden on clerical staff, and he expressed his hope that this kind of situation be taken into consideration when the committee makes its recommendations. There was some discussion about why a vendor-specific format was being suggested, rather than ascii or html. Maurice explained that html is problematic because about half of the formatting capability is lost when using it. Sandy Burke pointed out that one reason for selecting WordPerfect 5.1 was because it could be read by every other word processing system. Dennis Mueller suggested that a decision be postponed until Fall, since so many faculty are not on campus during the summer. He also stressed that people should not be forced to change to a new word processing software, but rather offer some enticement to change. Kathy Swigger suggested the use of conversion programs rather than changing the word processing standard. Cengiz stressed that a change of word processing standard should not be dictated to faculty, when the main problems lie with the administrative side of university business being able to share files. Sandy Burke stated that what the DCSMT is trying to do is decide what level of support people can expect for WordPerfect versus the Microsoft suite of products.

Walter Bowen, Joneel Harris, and Paul Schlieve all stated that their departments have documents that were produced in one format or another, and there is some uncertainty about whether those can continue to be used with a new format. Bowen suggested that there be a transition period during which people can change over the various documents that will not convert, and then provide some sort of conversion program to assist with those documents that can be converted.

There was discussion of available means of distributing information on campus, such as e-mail, the Web, listserves, Usenet News Groups, campus newspaper, and campus mail. Don Grose suggested a single campus electronic bulletin board where people could look for announcements. He stated that right now, people don't know where to look for the information. Dr. Turner asked if the open forum is a desirable vehicle for discussing campus-wide issues. Dennis Mueller said that a strategic planning forum is a good idea because it gives people a chance to offer input.

It was recognized that the issue of supporting more than one wordprocessing software package is a very important one, and standardizing on one package makes it much easier on support staff. Dr. Turner asked that the DCSMT take care that the terminology used in defining levels of support is very clear and definitive.

**Web Publishing Policy**

Maurice distributed a revised Web Publishing Policy document along with proposed guidelines. He asked for approval of the policy and the guidelines together. Maurice explained that this policy will not be part of the UNT publishing policy. He further explained that the guidelines are not intended to be hard and fast rules, but rather to be helpful in designing Web pages. A motion was passed to approve the policy and guidelines as presented.

**Instruction Program Group**

Jenny Jopling reported that the Instruction Program Group met and discussed the classroom survey, which is now underway. The committee is working on a proposal to include different levels of technology in classrooms; but also will include a baseline classroom since there currently is no group



on campus working on that. Neal Brand is conducting a departmental survey in which he will list several different levels of classrooms and asking departments to identify which levels they would use. The committee will also be looking at a study of classroom scheduling which was done by the assistant deans. Cengiz commented that the new projection technology available today is not so dependent on rooms being darkened, and asked that the IPG consider that when preparing their proposal.

## **Communications Program Group**

Paul Schlieve reported for the Communications Program Group that no progress has been made on the single-user id project of identifying a university-wide infrastructure system for that. In addition, the committee discussed the need to have some interaction with Dr. Turner and others regarding the building of the distance learning communications infrastructure to find out what kind of overlap impact there might be between that infrastructure and UNT's data communications infrastructure.

## **Other Business**

Dr. Grose asked Richard Harris when remote GroupWise would be available. Richard explained that individual LAN managers have the product, and the initial plan was to have them distribute it. He admitted that they have been less than proactive in distributing the product. It is a matter of getting departmental technical support people to have a plan for implementing it. Richard said he is looking into a different approach in which the Computing Center can provide more central support. Richard also reported that the Novell SMTP gateway is more robust now.

Susan Pierce announced that she is posting IRC documents in a section of the Web off the IRC home page, called "Issues." She asked Council members to send her any documents they want posted there.

Dr. Turner updated the Council on the development of the video-conferencing network. Equipment orders are about to be placed for the PDI site, and the Dallas Community College site in Richardson. The hub is going in here, initially for the Library, Education, Music, and ISB, with everything up this Fall for use in 4 team classes. Turner explained that the Model 60 Hub has a four-port multi-port card so that 4 sites can be run together.

There being no further business, the meeting was adjourned at 3:00 p.m.

## **August 19, 1997**

### **Internet Problems Discussed**

The Chair asked Maurice Leatherbury to report on the recent internet problems. Maurice explained that about a week and a half ago it all began with some router problems caused by a runaway processor in a machine on campus. After fixing the router, they heard that the computer systems may have been compromised by off-campus hackers attempting to access the main computing systems. Security patches have been applied and attempts have been made to bring the system back up but hardware problems have been experienced in the process. Some hardware is still not working properly; however, the Computing Center is working with SUN Microsystems to resolve the problems. It is believed that the hackers did not do any harm to the password files. As a result of Jove going down, the internet e-mail gateway between the internet and GroupWise has been intermittent, at best. They are trying to keep e-mail flowing through the system and hope to have Jove back up within a day or so. Security measures will be implemented to help prevent this in the future.

## Policy Issues

Susan Pierce distributed copies of the University of North Texas Computer Use Policy, which was drafted by the Standards & Cooperation Program Group, and the University Attorneys. Paul Dworak asked Council members for their comments about the document. There was some discussion during which suggestions were made to change some wording in the policy, and an amendment was suggested by John Windsor. It was agreed that the amendment and suggestions will be incorporated in the document; and the Council voted to approve the new policy as amended. The document will be re-drafted and sent to Dr. Brownell.

Paul Dworak recommended that the Computer Acquisition Policy and the Supported Computing Items List be stricken from the Policy Manual since they are no longer useful. The Chair stated that a vote can be taken on this recommendation at the September meeting.

Paul also reported that Jim Curry will meet with department heads and departmental purchasing agents individually to explain how the campus-wide workstation upgrade project will work.

Philip Turner reported that Richard Harris and he met with the Information Resources Steering Committee and the committee approved the Web Publishing Policy, so it will be going before the Board of Regents and if approved, into the Policy Manual.

## Distributed Computing

Maurice reported that at the last meeting of the Distributed Computing Support Management Team, the group voted to support the purchase and installation of Remedy, the call-tracking system for all distributed areas on campus. This software will allow distributed support managers to enter trouble calls, and escalate the problem if there is no immediate solution. Pending the approval of nearly \$85,000 by the Computing Center, the plan is to have the product up and running by early next year. Paul Dworak suggested that when the product is ready for use, a meeting be held with the supervisors of the persons who will be using the product, so that there is understanding of the product and how it is to be used. Maurice agreed and replied that they do plan to meet with Deans and department heads. In response to a question from Joneel Harris, Maurice said that Remedy is a general-purpose action request system and can be adapted for any sort of request system where tracking is needed. Maurice explained that there is a base price for the product and then an individual price for each client license. Richard Harris commented that the Computing Center hopes to fund the computer related part of the call tracking system and hopes that Telecommunications will use the system for tracking data connections requests, etc. If other departments wish to use the product for a different purpose, those departments would need to pay for their own licenses.

Maurice also reported that the DCSMT is still working on drafting a desktop standardization document which was discussed at the last IRC meeting. It is being re-written to provide more flexibility and it is hoped that a new document can be presented at the September IRC meeting.

## Team Web

Maurice also reported that Team Web has been working on possibly forming a group early in the Fall semester to work on Web development issues. Maurice stated that Academic Computing has been given 1-1/2 additional positions to provide Web support, pending all of the appropriate approvals. Team Web will help set priorities for the use of this new personnel. Virginia Wheelless asked who would be responsible for updating the new Web Publishing Policy. That question was discussed, and consensus was that the Standards & Cooperation Program Group would be responsible for keeping the policy up to date, since that group was originally charged with addressing the issues in the policy.



## Communications Program Group

Bill Buntain distributed a list of proposals from the Communications Program Group. He asked the Council to consider the proposals and grant approval before he begins to implement the projects. Bill explained the proposals stating that all of the projects are for the purpose of improving the centralized and distributed management of the Novell Network. Discussion followed, during which it was pointed out that some computers on campus will not be able to run the ManageWise agents, since they are not Intel microcomputers. Bill stated that he would change the proposal to more specifically state which microcomputers would be affected by using the ManageWise product. Bill said that the product will provide an excellent inventory database with each distributed area's information compiled and stored on the associated server for that area, which can then be used for planning purposes. He assured the group that there is no intention to propose something that would present problems to users. Further, Bill assured the group that the ManageWise product will not pick up data from any computer's hard drive, or survey what software is loaded on a given machine.

Bill explained that in Proposal #3, the Discovery component of ManageWise gathers only the ethernet address of a given machine, the IP address, and allows the mapping of the communications network. It does not pick up the inventory hardware or the configuration of a machine. It was explained that the software will be installed on machines through the network and will run periodically during the login of a machine. Bill wants everyone to know about it before it is used. Following more discussion, Dr. Turner suggested that Proposal 2 be reworded as follows:

"All microcomputers attached to the UNT network, that can run ManageWise agents, will do so to permit the collection of hardware inventory and configuration information."

Bill agreed to the change. Bill stated that he hoped to have a draft set of guidelines at the September meeting, so that a vote can be taken on these proposals at that time. Bill offered to bring his Manager to the next meeting to answer questions about the proposals. Bill will have a draft document to e-mail to IRC members within the next two weeks. He asked members for their input on the issue of mapping the network. Jim Poirot said that if network managers agree to this, he sees no problem with it. Bill pointed out that there seems to be some sensitivity within their departments about the use of these products. It was suggested that network managers survey their users and directors to get a true idea of whether or not they approve of the use of these products. The Chair suggested that Bill bring a draft set of guidelines to the IRC next month, then IRC members can talk with their constituencies about the proposals. Paul Dworak suggested that Bill speak to the Faculty Senate about the products and their purpose of improving the monitoring and management of the network. Bill said he would discuss the guidelines in detail with the network managers before bringing them back to this group.

## Instruction Program Group

Jenny Jopling reported that the Instruction Program Group met and discussed the nearly complete results of the departmental survey to determine what percentage of use would be made of variously equipped classrooms. John Cooper, the Campus Architect, is developing a baseline standard for classrooms. The IPG hopes to have a proposal back to the IRC by September or October.

## Other Business

John Windsor asked if there is a site license for Acrobat. It was reported that a volume purchase agreement for all Adobe products has been negotiated for the campus. Paul Dworak explained that it is not necessary to have a license for every Acrobat user. He continued that some action has been taken to investigate a site license for Acrobat, but it is uncertain what the status of that is.



The Chair thanked those members who have served on the Council who will be replaced as of September 1, 1997. There being no further business, the meeting was adjourned at 3:45 p.m.

## September 16, 1997

**Voting Members (1997/98 Academic Year):** Philip Turner (Chair), Joneel Harris, Jenny Jopling, Ramu Muthiah, Don Schol, Don Grose, Steve Miller, Walter Bowen, Virginia Wheeless, John Windsor, Ginny Anderson, Bill Buntain, Mike Kozak, Carolyn Cunningham, Paul Dworak, Jim Poirot, Dennis Mueller, Allen Livingston, Kathleen Swigger, Steve Grant, Robert Nimocks, Neal Tate, Sue Ellen Richey (Recording Secretary) **Non-voting Members (1997/98 Academic Year):** Richard Harris, Maurice Leatherbury, Coy Hoggard, Jim Curry, Rondel Stevens

The Chair introduced new members: Mike Kozak, representing Faculty Senate, Neal Tate, representing University Planning Council, and Ginny Anderson representing Fiscal Affairs.

The Chair reported that there was no IR Steering Committee meeting in August; however, he reported that the bids for the 3 off-campus sites, PDI, Lacroy Technology Center, and the Downtown Dallas Education Center, should go out tomorrow and a full schedule of classes is set up for those sites in the Spring 1998 semester. It is hoped that construction will start November 1 and be completed by December 1.

### Distributed Computing Support Management Team

Maurice Leatherbury reported for the Distributed Computing Support Management Team that the Remedy Action Request System has been received and an implementation team is meeting to customize it to UNT's needs. The committee is also working on a plan to provide hardware support for a single model of laptop, beginning with finding vendors for laptop purchases and maintenance.

### Team Web

Maurice also reported for Team Web that there will be an informal meeting next week of people who are interested in Web development on campus. At Team Web's last meeting it was decided that they need to update UNT's top level home page, which will not include any major structural changes.

### Instruction Program Group

Jenny Jopling reported for the Instruction Program Group that they will coordinate with Jim Curry, who has been working on a classroom technology evaluation project for the Provost. Jim is preparing a proposal which will be submitted directly to the Provost, and Jim has asked that the Instruction Program Group work with him. Jenny distributed a data sheet showing results of a survey of classroom needs that the IPG conducted. Maurice Leatherbury stated that the physical inventory of classrooms has been completed and the data turned over to Jim Curry and Dr. Kesterson.

Dr. Turner reported that some progress has been made in determining fees for distance education sites. There is a new law which states that fees cannot be charged unless they are in place at the time of registration. The idea being proposed is to have a two-level fee:

1. for students who are 50 miles or further from Denton; and
2. for students who are within 50 miles.

Unofficially, the suggested charges are \$40.00/credit hour for the level one and \$15.00/credit hour for level two. There is another new law which states that students cannot be charged for services which they cannot be reasonably expected to use. As a result, UNT will be waiving some of its fees to

students who take classes in remote sites. Dr. Turner stated that UNT is not alone in dealing with the difficult issues of costing distance education and shared with the council what the University of Texas is doing in this regard, having met with their Vice President of Technology and Distance Education. They evidently have committed to developing a virtual MITTC (Multi-institutional Teaching Center). Instead of building new university campuses, several universities will join together to provide a MITTC, thus providing educational services to areas of Texas where there are no colleges and universities (eg., Dallas Downtown Education Center). Other universities are also uncertain of how much to charge for these services.

In response to a question from Maurice Leatherbury, Dr. Turner stated that UNT's Computer Services fee will not be waived because there are technology costs even for students in remote sites, to support the infrastructure to deliver services to those sites.

## Communications Program Group

Bill Buntain reported for the Communications Program Group, that he is presenting for a vote the four proposals he presented at the August IRC meeting. He noted that the proposals and the ManageWise Implementation Guidelines have been reviewed and approved by the Program Group, the Network Managers, as well as the Distributed Computing Support Management Team. Bill distributed copies of the proposal document and the ManageWise Implementation Guidelines and went over them with the council. They are as follows:

1. The Computing Center shall be granted browse rights to all containers and objects and read rights to all properties of those containers and objects in the Novell Directory Services tree for purposes of backing up the entire tree nightly. [Bill explained that this is needed because in the event of a disaster, a back-up of the entire tree would be of tremendous benefit in recovery from that disaster. Rights to all servers are essential to that backup.]
2. All microcomputers attached to the UNT network that can run ManageWise agents will do so to permit the collection of hardware inventory and configuration information.
3. The Computing Center will be authorized to use the Discovery component of ManageWise (or gather the same information from distributed Discovery processes) to map the entire UNT campus network down to desktop microcomputers and to develop a consolidated database of hardware inventory and configuration information for purposes of planning and analysis.
4. Network and Microcomputer Services will draft a set of guidelines for the use of ManageWise to be reviewed by the Communications Program Group before campus-wide implementation of ManageWise.

[Proposals 2-4 all deal with the use of ManageWise. There is a commitment to improve network management, and ManageWise is provided free through the Novell site license; therefore, it was chosen as a vehicle for making network management improvements. This product collects basic hardware configuration information from workstations that can run ManageWise. The product also has the capability of mapping the network for the purpose of pinpointing trouble sources, as well as for planning and analysis.]

The Chair clarified that Proposal #4, when presented in August, was to "draft a set of guidelines;" however, the guidelines have been drafted, and are now being presented for approval, as distributed.

Discussion followed during which Bill clarified that even though ManageWise can be configured to pull software information from user computers, the guidelines clearly state that this will not be done. In addition, it was explained that there is a remote control function in ManageWise which enables a problem to be fixed on a given workstation remotely, only after access is granted by the user. Bill explained that the only cost of implementing ManageWise is the labor cost involved in setting up the program on each server and the 2-3 seconds it takes to refresh the system once a week. It was pointed out that users should be advised that this is going to take place, prior to its implementation.

Bill stated that the guidelines will be posted on the Web, and that network managers would notify their users. Some concern was expressed about the possibility of ManageWise being used for the purpose of software inventory, without the knowledge of users. Bill assured the committee that no changes to the guidelines will be made without approval of the IRC. It was acknowledged that if State Auditors should dictate that an audit be done of the University by using this product, UNT would have no choice but to comply without warning users. The Chair asked that when the guidelines are posted on the Web that there should be a statement explaining the purpose of this action and pointing out that users have control over the process as it relates to their desktop, and assurance that no changes will be made to the guidelines without the appropriate deliberation and approvals.

A vote was called for, and the proposals were approved with only one opposing vote.

## **Other Business**

Dennis Mueller asked the Chair if there was any news regarding funding for the Innovative Projects proposal of \$600,000. The Chair stated that he would find out the status of the funding of that proposal.

Joneel Harris reported that the Administrative Program Group has not met but that at their next meeting, they plan to hear from Susan Pierce about security, and technology reporting. Since Mike Kozak is replacing John Todd on the IRC, he will also take John's place on the Administrative Program Group.

Bill Buntain added that the Communications Program Group also needs new members, since Janet Chakour and Dr. Neuberger will no longer be meeting with them. The Chair encouraged Bill to seek new members for that committee.

Allen Bradley made a presentation on ManageWise to the group. There being no further business, the meeting was adjourned at 3:15p.m.

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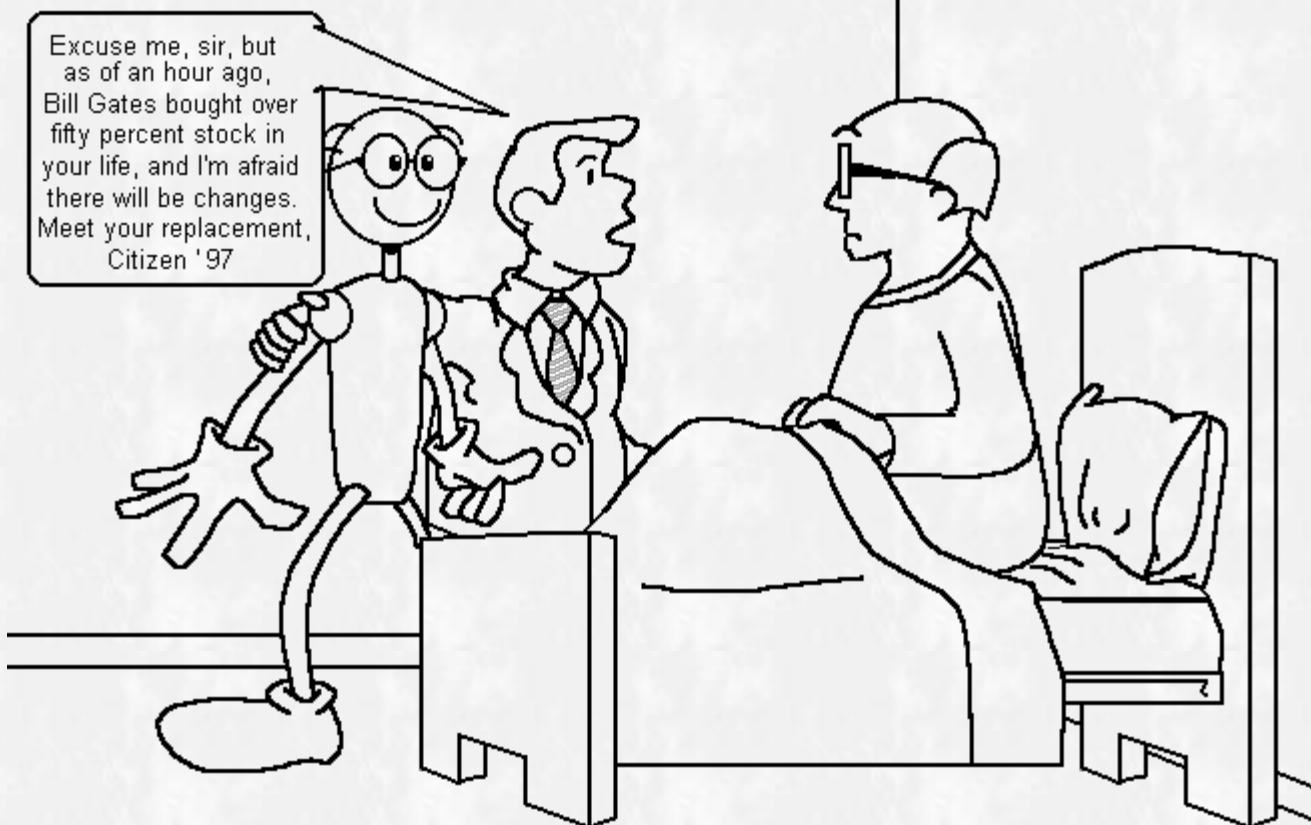
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# Shift Key

By [Randy Milholland](mailto:randy@unt.edu) ([randy@unt.edu](mailto:randy@unt.edu))

## SHIFT KEY



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